

wherein X is selected from $-O-$;

B is selected from hydrogen, hydroxy, optionally substituted C_{1-4} -alkoxy, optionally substituted C_{1-4} -alkyl, optionally substituted C_{1-4} -acyloxy, nucleobases, DNA intercalators, photochemically active groups, thermochemically active groups, chelating groups, reporter groups, and ligands;

P designates the radical position for an internucleoside linkage to a succeeding monomer, or a 5'-terminal group, such internucleoside linkage or 5'-terminal group optionally including the substituent R^5 ;

one of the substituents R^2 , R^{2*} , R^3 , and R^{3*} is a group P^* which designates an internucleoside linkage to a preceding monomer, or a 3'-terminal group;

one pair of non-geminal substituents R^{4*} , and R^{2*} , designating a biradical consisting of 2-5 groups/atoms selected from $-(CR^*R^*)_r-Y-(CR^*R^*)_s-$, $-(CR^*R^*)_r-Y-(CR^*R^*)_s-Y-$, $-Y-(CR^*R^*)_{r+s}-Y-$, $-Y-(CR^*R^*)_r-Y-(CR^*R^*)_s-$, $-(CR^*R^*)_{r+s}-$, each R^* is independently selected from hydrogen, halogen, hydroxy, mercapto, amino, optionally substituted C_{1-6} -alkoxy, optionally substituted C_{1-6} -alkyl, DNA intercalators, photochemically active groups, thermochemically active groups, chelating groups, reporter groups, and ligands, Y is $-O-$, $-S-$, 0 (zero) or $-N(RN)-$, and each of r and s is 0-4 with the proviso that the sum $r+s$ is 1-4, and provided that when the biradical is $-(CR^*R^*)_r-Y-(CR^*R^*)_s-$, then Y is $-S-$ or $-N(R^{N*})-$; and each of the substituents R^{1*} , R^2 , R^3 , R^5 , and R^{5*} , which are present and not involved in P, P^* is independently selected from hydrogen, optionally substituted C_{1-12} -alkyl, optionally substituted C_{2-12} -alkenyl, optionally substituted C_{2-12} -alkynyl, hydroxy, C_{1-12} -alkoxy, C_{2-12} -alkenyloxy, carboxy, C_{1-12} -alkoxycarbonyl, C_{1-12} -alkylcarbonyl, formyl, aryl, aryloxy-carbonyl, aryloxy,

arylcarbonyl, heteroaryl, heteroaryloxy-carbonyl, heteroaryloxy, heteroarylcarbonyl, amino, mono- and di(C₁₋₆-alkyl)amino, carbamoyl, mono- and di(C₁₋₆-alkyl)-amino-carbonyl, amino-C₁₋₆-alkyl-aminocarbonyl, mono- and di(C₁₋₆-alkyl)amino-C₁₋₆-alkyl-aminocarbonyl, C₁₋₆-alkyl-carbonylamino, carbamido, C₁₋₆-alkanoyloxy, sulphono, C₁₋₆-alkylsulphonyloxy, nitro, azido, sulphanyl, C₁₋₆-alkylthio, halogen, DNA intercalators, photochemically active groups, thermochemically active groups, chelating groups, reporter groups, and ligands, where aryl and heteroaryl may be optionally substituted;

and basic salts and acid addition salts thereof.

154. (Amended) An oligomer of claim 141 wherein R^{3*} designates P^{*}.

176. (Amended) An oligomer of claim 141 wherein each of the substituents R^{1*}, R², R³, R^{3*}, R⁵, and R^{5*}, of the one or more LNA nucleosides, which are present and not involved in P, P^{*}, is independently selected from hydrogen, optionally substituted C₁₋₆-alkyl, optionally substituted C₂₋₆-alkenyl, hydroxy, C₁₋₆-alkoxy, C₂₋₆-alkenyloxy, carboxy, C₁₋₆-alkoxycarbonyl, C₁₋₆-alkylcarbonyl, formyl, amino, mono- and di(C₁₋₆-alkyl)amino, carbamoyl, mono- and di(C₁₋₆-alkyl)-amino-carbonyl, C₁₋₆-alkyl-carbonylamino, carbamido, azido, C₁₋₆-alkanoyloxy, sulphono, sulphanyl, C₁₋₆-alkylthio, DNA intercalators, photochemically active groups, thermochemically active groups, chelating groups, reporter groups, and ligands, and halogen, where two geminal substituents together may designate oxo, and where R^{N*}, when present and not involved in a biradical, is selected from hydrogen and C₁₋₄-alkyl.

177. (Amended) An oligomer of claim 141 wherein each of the substituents R^{1*}, R², R³, R^{3*}, R⁵, and R^{5*}, of the LNA(s), which are present and not involved in P, P^{*} designate hydrogen.

201. (Amended) A diagnostic or analysis kit comprising a reaction body and one or more oligonucleotides of claim 156.